



WinAQMS

WinCollect

Ecotech Air Quality Monitoring Data Acquisition System



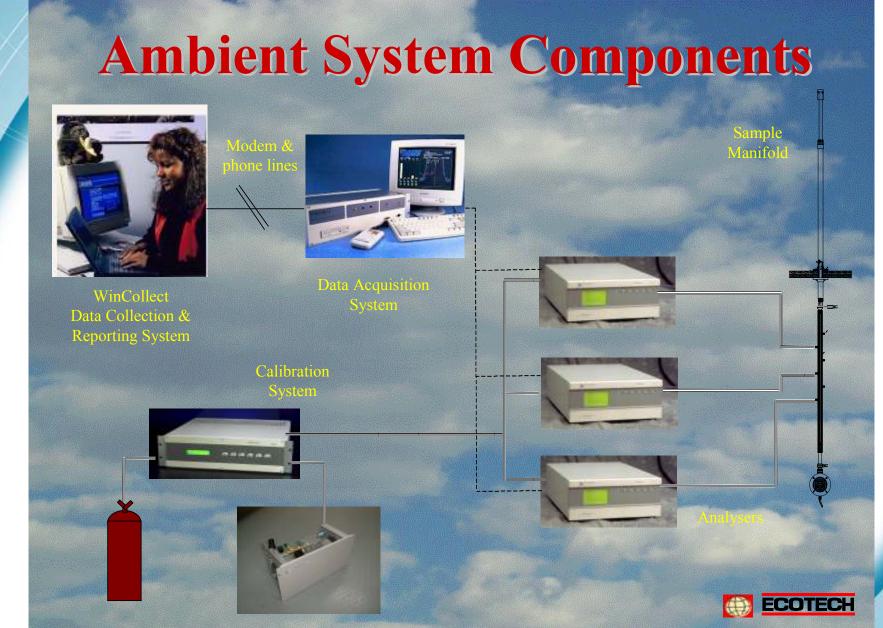


WinAQIS

Designed by air monitoring system people, for air monitoring system people

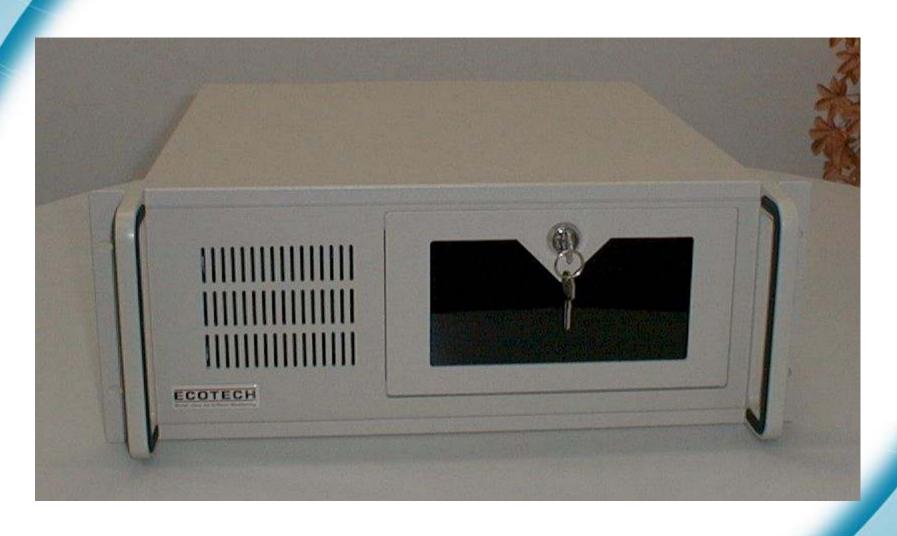
www.AmericanEcotech.com







WinAQMS Datalogger "Server" = hardware + datalogging

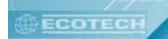




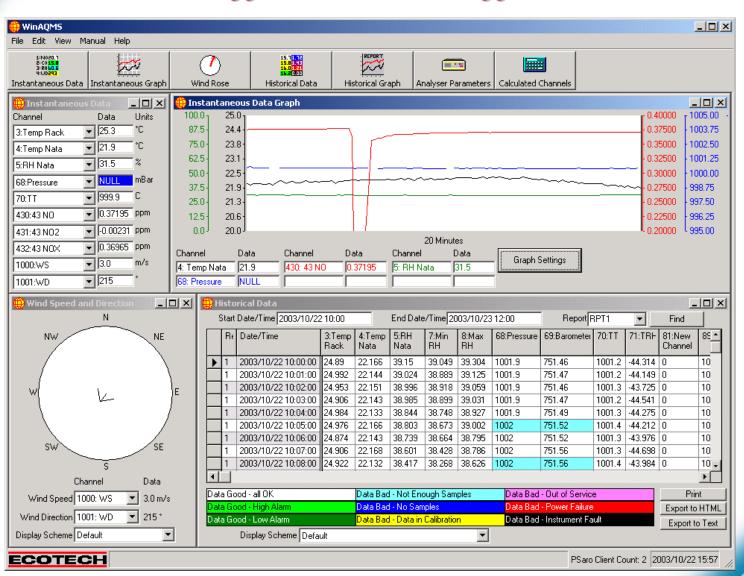
WinAQMS Datalogger "Server" = hardware & datalogging

- Dedicated server, specifically configured solely for ambient air monitoring station use
- Windows XP PRO operating platform is pre-installed on the WinAQMS Server at the Ecotech factory
- Handles all communication between the logger and instruments, via USB, RS-232, ethernet, or analog comms.
- Supports direct digital communication from many manufacturers instrumentation
- Easily capable of storing 30 years worth of data
- Remote communication via: RS232 (PSTN, Radio etc), TCP/IP (wireless or cable network), broadband, GSM, or telephone system dial-up.





WinAQMS Datalogger "Client" = Datalogger GUI for site maintenance





WinAQMS Datalogger "Client" = GUI for site maintenance

- "Client is the graphic user interface of the WinAQMS datalogger
- Displays instantaneous and historical data in graphical and listreport type formats
- Included as part of the cost of WinAQMS datalogger
- Provides user-friendly access to settings and data
- Communicates with "WinAQMS Server" to retrieve information
- Server keeps collecting data, even if Client GUI "crashes".
- "Remote" Client enables one (or more) site technicians to perform remote diagnostics and maintenance
- One Remote WinAQMS Client may interrogate multiple WinAQMS dataloggers



Instantaneous Graph



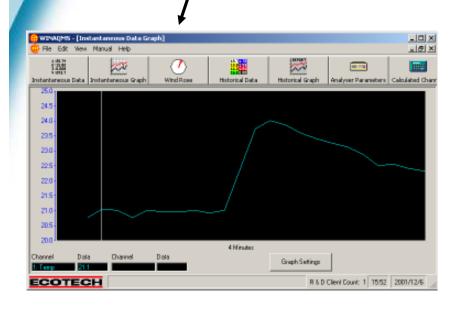








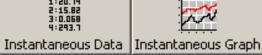




- Plots instantaneous data over a user specified time period
- Ideal for the monitoring of current air quality trends
- Plot colours automatically change to indicate air quality exceedances
- Useful for viewing manual calibration sequences
- 6 data plots simultaneously
- All graph settings are user configurable



Windrose





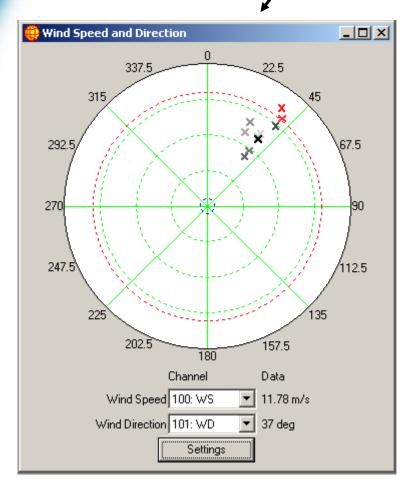




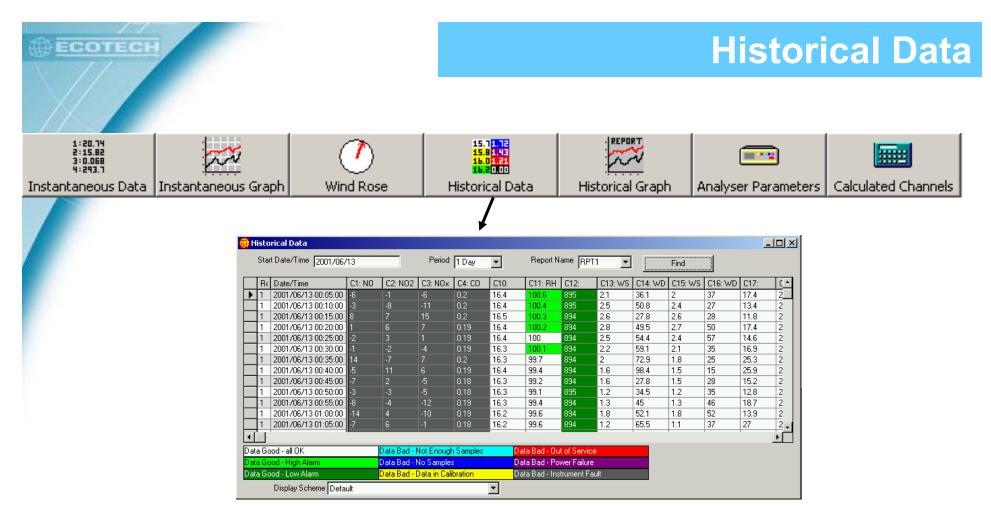




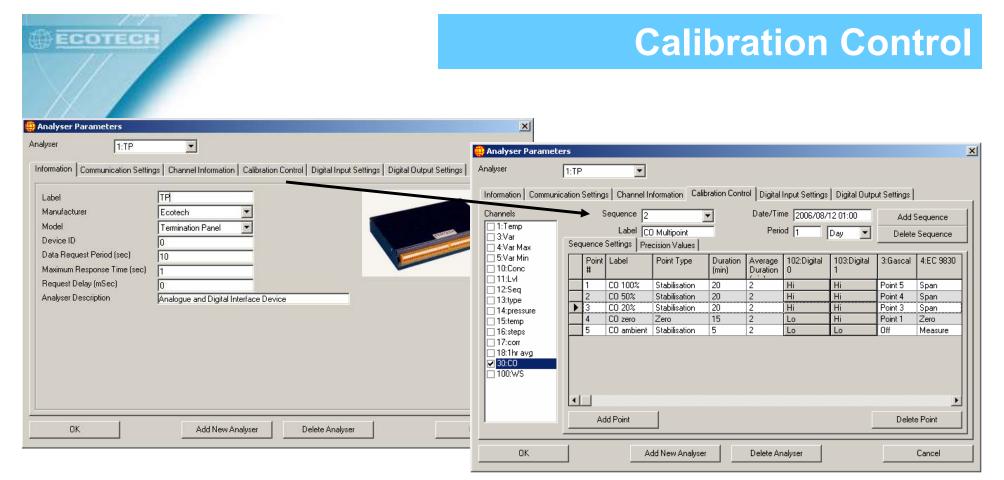




- View current wind conditions at a glance.
- Multiple ways of viewing data readings including variable data history size, fading data and data colour changing for alarm values.



- Displays historical data from the database for a user selectable period
- Data automatically highlighted to represent certain "status conditions"
- Report can be one of RPT1, RPT2, RPT3, RPT4, Span, Zero, Precision or all reports



- Multipoint calibrations can be configured using a sequences made from a number of span points.
- Sequences can be set to run for multiple channels
- Point duration can be varied
- Analyzer state (span, zero etc) and digital outputs can be set for each point in a sequence
- Precision values for each channel can be set



Calculated Channels





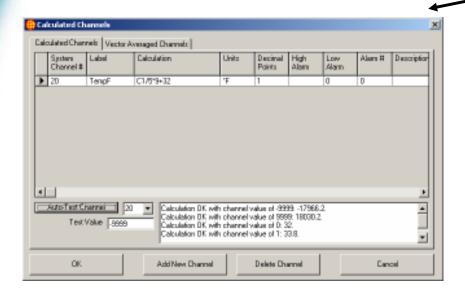








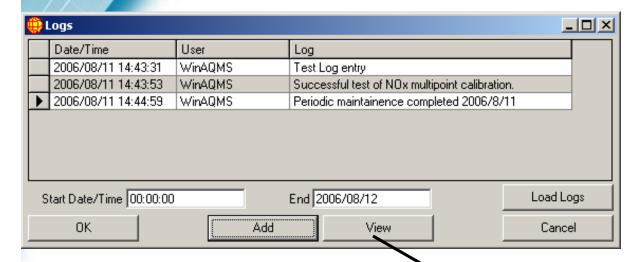




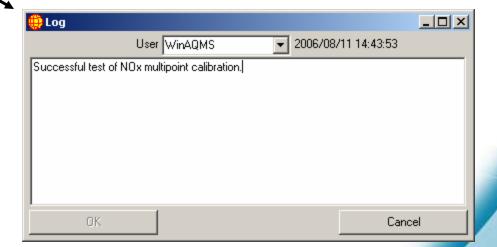
- Provides for creation of new channels to perform complex scalar calculations
- Supports vector averaged channels used to calculate Sigma Theta and other vector averages
- Also supports rolling averages
- Features an auto test function to ensure formula is correct



Log Book



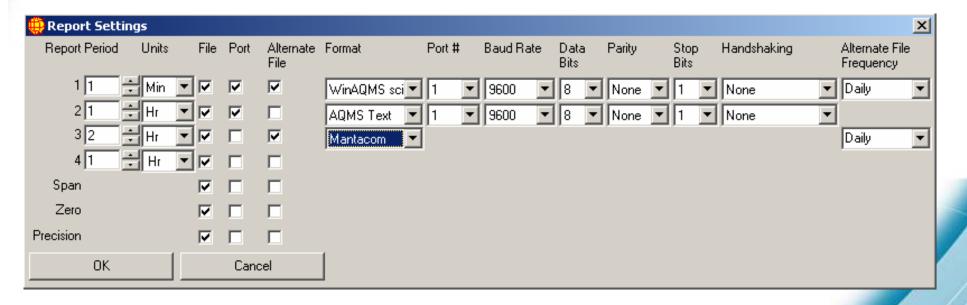
- Allows important information to be recorded by site operators.
- Logs can be retrieved remotely.





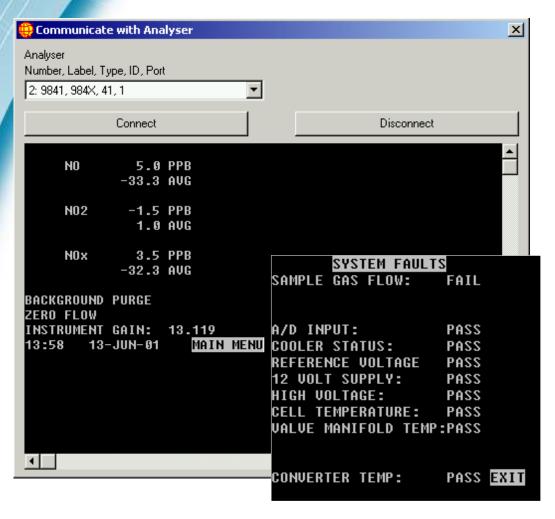


- Data stored in ASCII text format
- A new data file is automatically created each day
- Up to 4 separate data report types with individually configured averaging periods plus Span, Zero and Precision Reports
- Data can also be output to Serial port or stored in alternative data file formats.





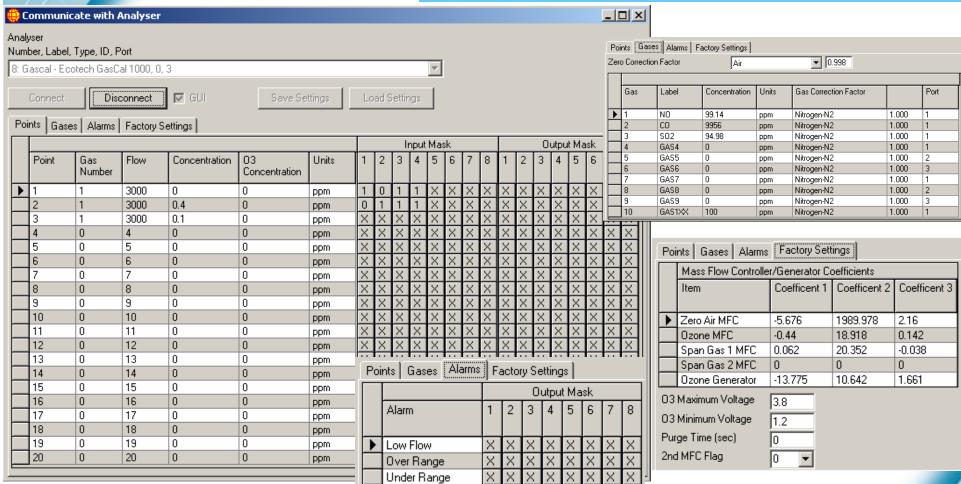
Direct Communication



- Supports direct communication with analyzers which have ANSI terminal mode e.g. EC9800
- Enables the operator to remotely view the analyzers' configuration, status and all other information which is available through the analyzers front display
- Provides an extremely powerful station diagnostic tool



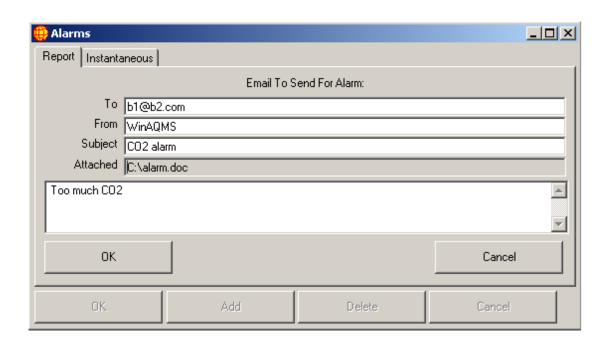
Direct Communication with GasCal



WinAQMS now enables direct communication and configuration of the GasCal





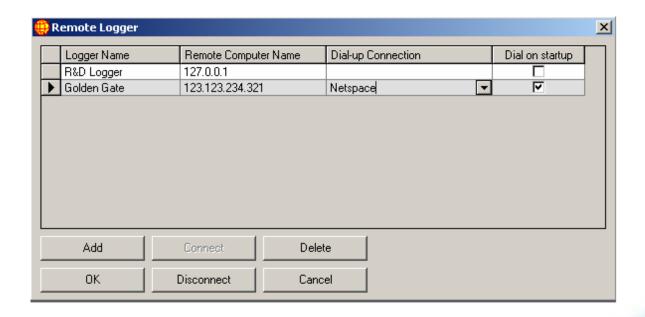


- May be configured to automatically send out alarm based emails.
- Can now also automatically dial up the site maintenance person in his/her office and display an on-screen alarm!



Remote Communications

- WinAQMS Client provides for remote access to a WinAQMS Server
- Select from a list of remote loggers to connect to.
- Enables a single operator to oversee multiple loggers from a remote location.







WinAQMS

Designed by air monitoring system maintenance operators, for air monitoring system system maintenance operators



Ecotech WinCollect

Data Evaluation & Reporting

Software





Enables full remote control, data collection and generation of reports from the monitoring stations.

Requires:

- Central Windows Based PC
- WinCollect Software
- Modem or other comm

to loggers ...can connect to



Ecotech WinAQMS, ESC, Campbell, Zeno, and also

connects directly to any stand alone TEOM, BAM, nephelometer, Ecotech MicroVol, Ecotech HiVol, etc

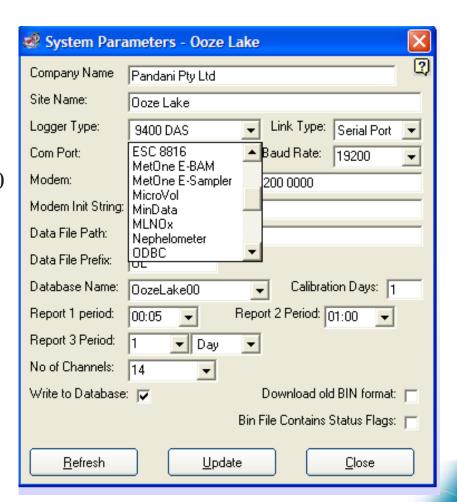


- Single User Version install on any Windows based workstation or laptop and connect to one or many air monitoring stations
- Multiuser Version utilizes SQL
 Database, enables multiple WinCollect end-users to work at same time



Data Collection

- Able to import data from a variety of Data Acquisition Systems
 - WinAQMS
 - EC9800s, M9003, MicroVol, HVS3000
 - Ecotech 9400
 - Met One E-BAM, BAM1020
 - TEOM 1400AB
 - Thermo 5400/8400N/S, Dustscan
 - Datataker
 - Opsis 600 Analyser
 - ESC loggers
- Manual import of files downloaded from:
 - Unidata loggers & Starloggers





Communication Media

WinCollect communicates through any of the

following media

- PSTN phone lines
- ISDN phone lines
- GSM/CDMA
- Radio Modem
- Satellite
- TCP/IP network
- Dial-up network
- File Import - file downloaded using "other" software and then can be manually or automatically imported
- Communication diagnostic screen

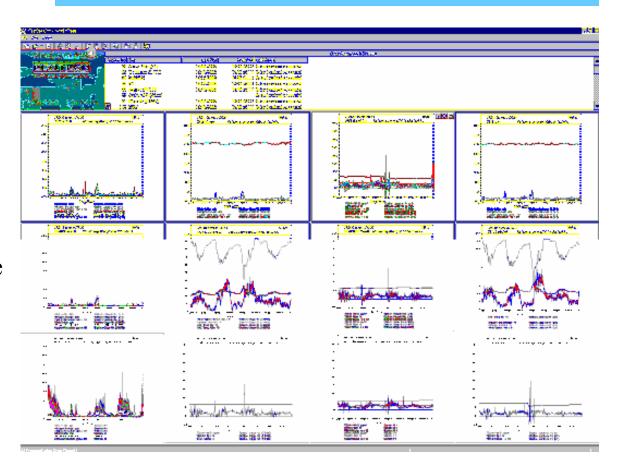




Network Configurations

Dial-up a TCP/IP network of WinAQMS effectively giving access to all loggers through one modem & phone line

- No need for modems to be connected to each loggers
- Possible to monitor multiple systems through the one phone call



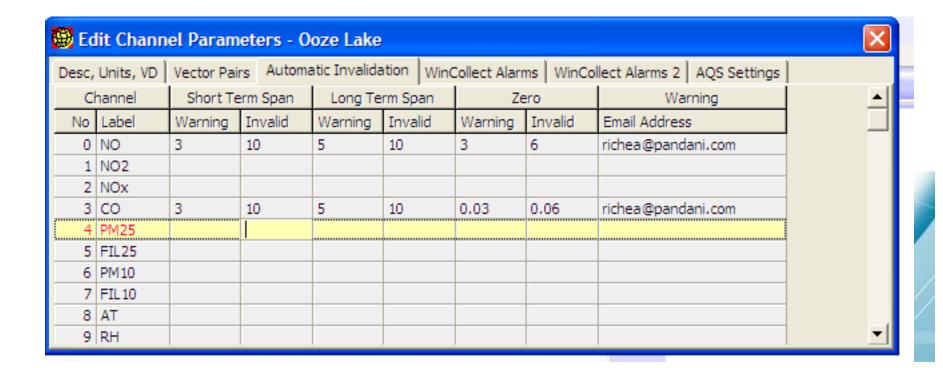
Direct TCP/IP access to most supported loggers and analyzers.

Possible to view data from multiple systems simultaneously on the one WinCollect screen



Automatic Data Validation

- Data may be automatically marked invalid based on:
 - Out of tolerance concentration average
 - Out of tolerance rolling average
 - Out of tolerance span/zero calibration





🧱 Albedo DialUp - WinCollect

File Configure Logger View Stations Database Report Diagnostics Help























ECOTECH

World-class Air & Water Monitoring

c, Units, VD	Vector Pairs	Automatic In	validation \	WinCollect Ala	rms WinCo	llect Alarms 2 AQS Settings
CH No	CH Label	Dec Pts	Units	VD Low	VDHigh	Description
0	NO	2	ppm	-10	1000	Nitrogen Oxide
1	NO2	2	ppm	-10	1000	Nitrogen Dioxide
2	NOx	2	ppm	-10	1000	Oxides of Nitrogen
3	co	2	ppm	-0.1	100	Carbon Monoxide
4	PM2.5	1	µg/m³	-50	5000	Particulate 2.5µm
5	Filter25	0	%	-1	100	Filter 2.5µm
6	StackTP	1	°C	0	500	Stack Temperature
7	StackRH	1	%	0	150	Stack Humidity
8	StackPr	2	atm			Stack Pressure
9	StackVe	1	m/s	0	500	Stack Velocity
10	H2Con		CONTRACTOR OF THE PARTY OF THE	4.7		Hydrogen Leak Check
11	5V_ref		٧	2.5	7.5	5V Reference
12	0V_ref		٧	-2.5	2.5	0V Reference
13	9800Span		ij	1	1000000	9800Span
14	9800Zero			1	Ĭ.	9800Zero
15	Status2				IX.	Teom 2.5 Status
16	At_Teom	1	°C	0	500	AT Teom
17	Bp_Teom	1	J.			BP Teom
18	Blowback			1	Ĭ.	Blowback Status
19	RackTemp	1	°C	1	50	Rack Temperature
20	MainFlow		J.	4.0		MainFlow
21	Aux_Flow		J	4	I.	Aux_Flow
22	Mode2.5		J.		I.	PM2.5 Mode
23	HCSpan			[]	I.	DG Control H2 Span
24	HCZero				I.	DG Control H2 Zero
25	Blowbac2				I.	Blowback Status
26	Cal_6				II.	Cal6
27	Cal_7			1	I.	Cal7
28	Cal_8				I.	Cal8
29	PM10	1	μg/m³	-50	5000	Particulate 10µm
30	Filter1	0	%	-1	100	Filter 10µm
31	Status1					Teom 10 Status
32	At-teom2	1	°C			AT-Teom2.5

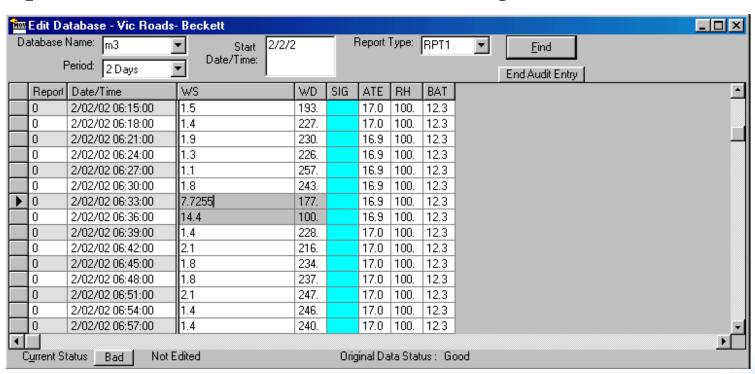
Friday, 14:58:10



Automatic Data Validation

Invalid data is marked and highlighted in the database making it easy to locate.

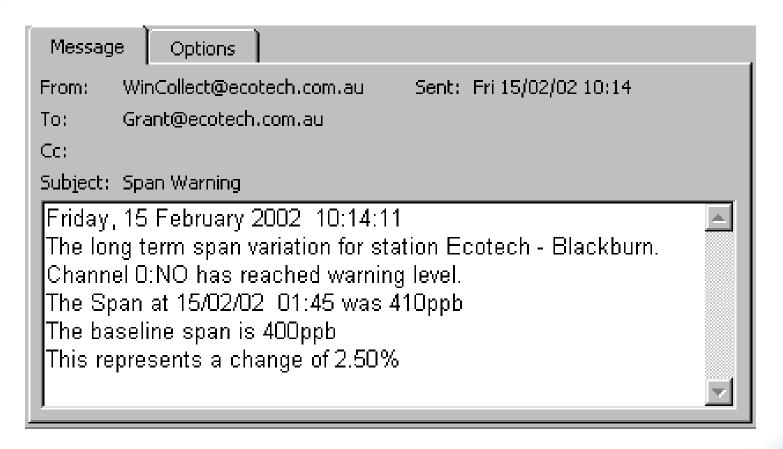
Any manual changes made to data in the database requires the operator to enter a reason for the change.





Automatic Data Validation

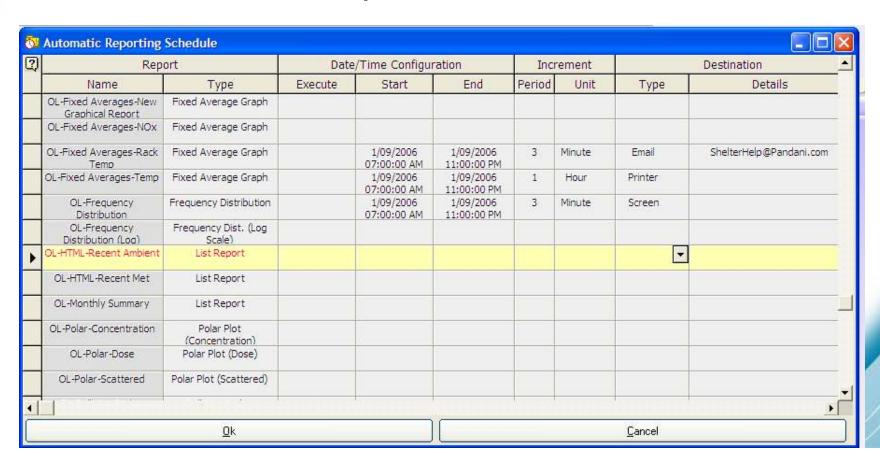
In the event that data downloaded is invalid an automatic email can be sent to any number of email addresses.



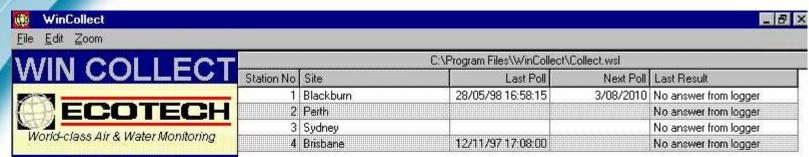


Automatic Report Scheduling

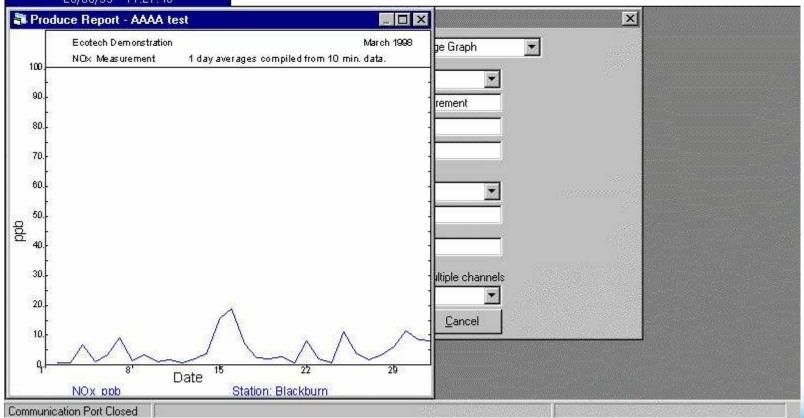
- Data can be automatically downloaded and reports generated automatically
- Reports can be sent to printer, screen, file, email, serial port.







26/08/99 11:27:40





Start Microsoft PowerPoint - [Vie...



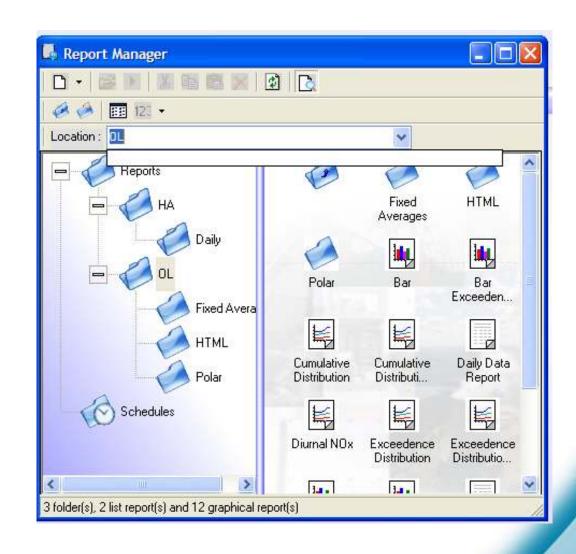


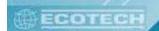


Report Management

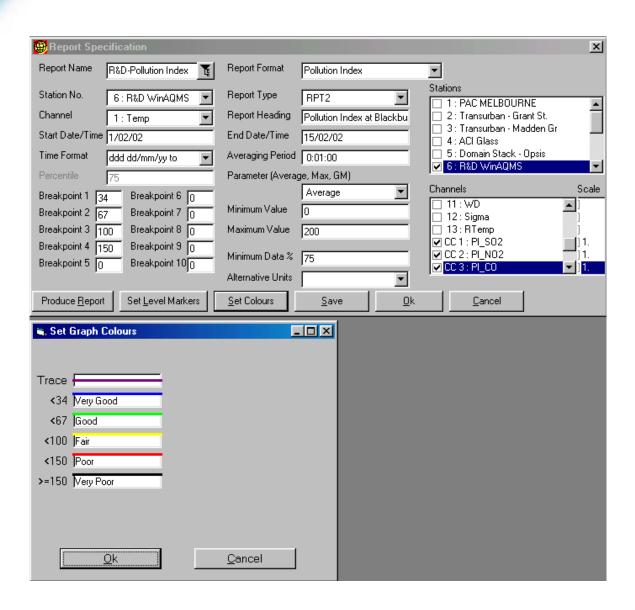
Management of reports now inherits greater power, flexibility, and efficiency with the introduction of a report management interface:

- Browse and identify report types and schedules easily
- Preview a reports last generated output
- Structure your report development





Data Reporting Setup





Reports are generated in the standard Windows Metafile format enabling them to be copied directly to other Windows applications and printed on any printer supported by Windows 2000/XP

Support for JPG, PCX, BMP, TGA and TIF graphic formats is also available for automatically generated reports

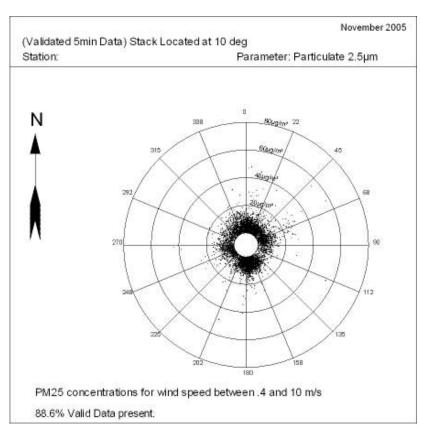
By dynamically saving reports in JPG format to a WWW server's network drive, the latest data can be made available in real-time (immediately following validation) via the internet.



Graphical Reporting

Graphs & Reports supported include:

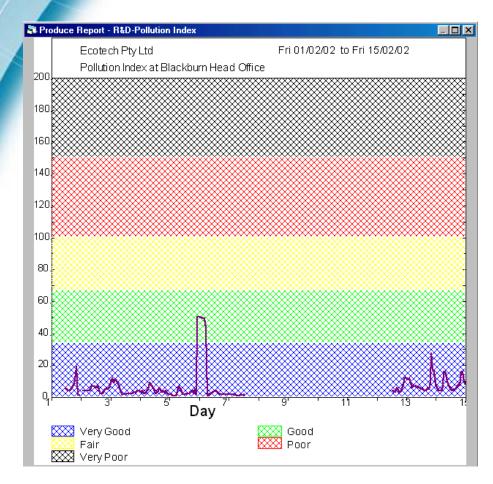
- Line, Bar Graphs of:
 - Average
 - Maximum/Minimum
 - Standard Deviations
 - Rolling Averages
 - Percentile
 - Log Mean
- Diurnal Graphs
- Average Pollution Plots
- Percentage Pollution Concentrations
- Scatter Plots with linear regression
- Frequency Distribution Histograms
- Cumulative Frequency Distribution Plots
- Wind Rose Polar Pollution, Polar Scatter Plots
- List reports

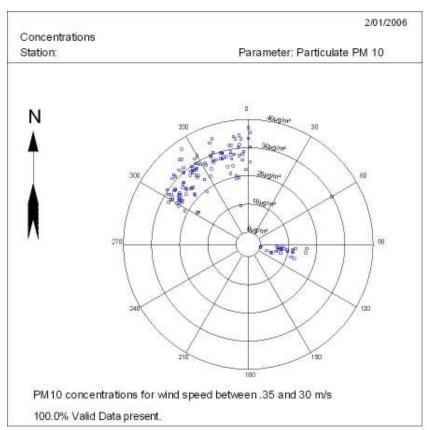


Scatter Plot



Graphical Reports

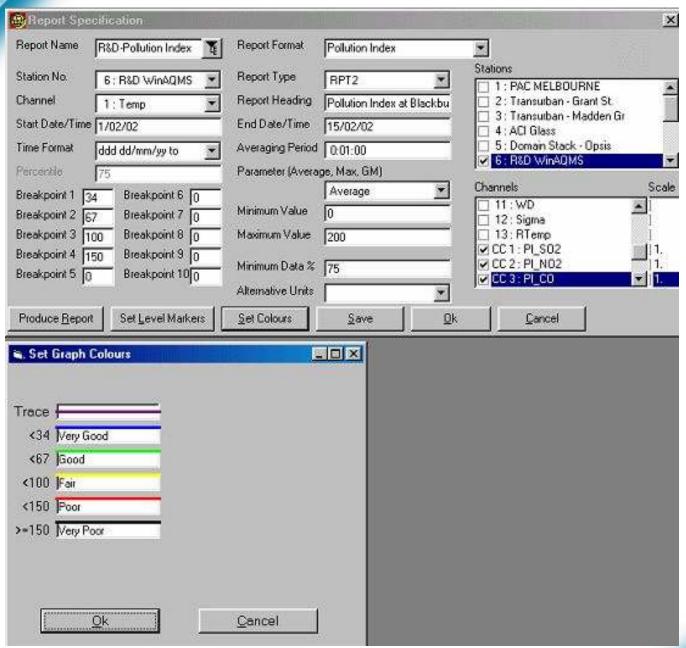




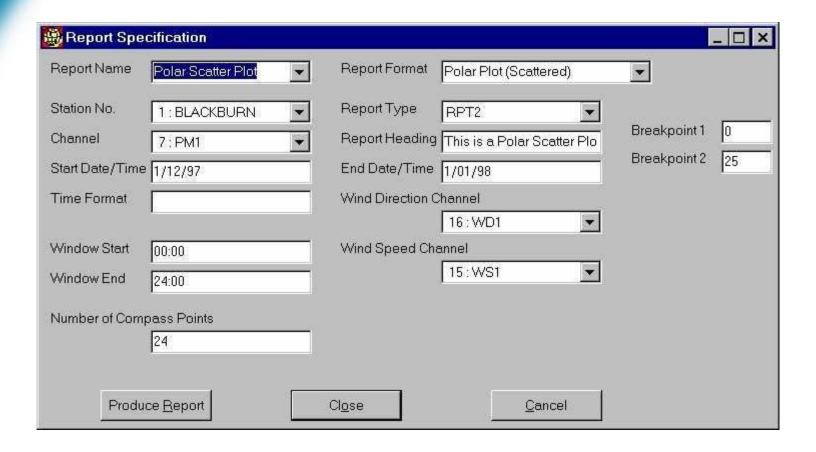
Pollution Rose

Pollution Index



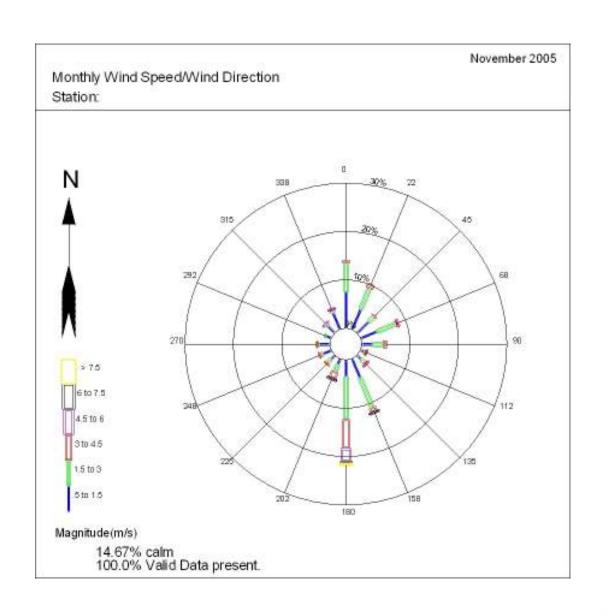


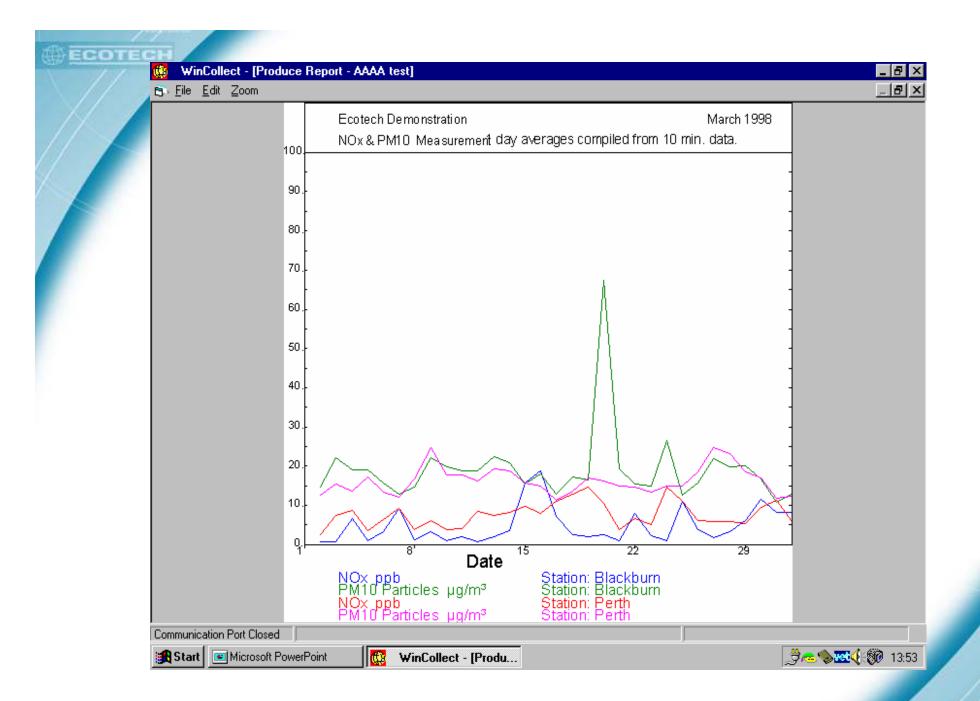


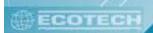


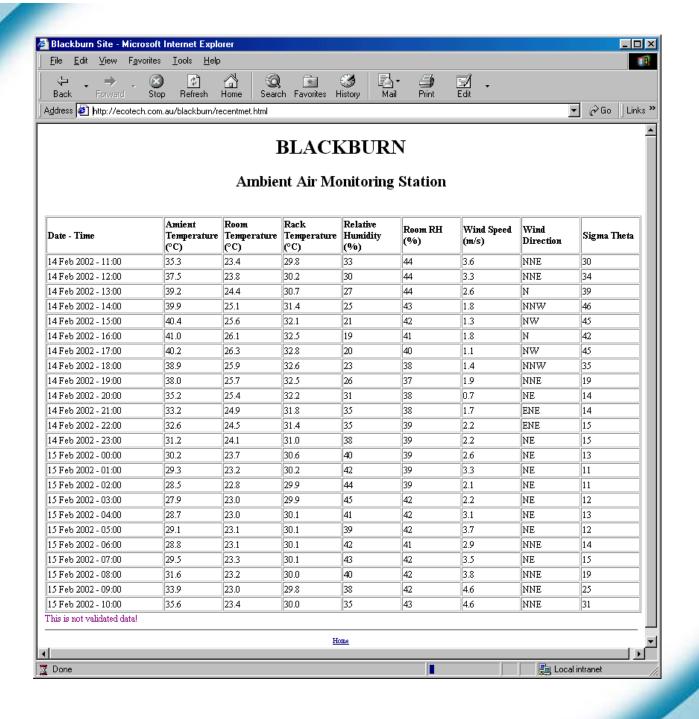


Windrose Graph







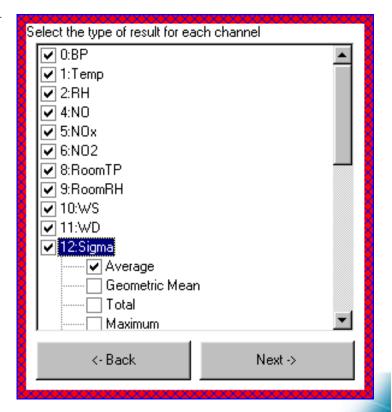


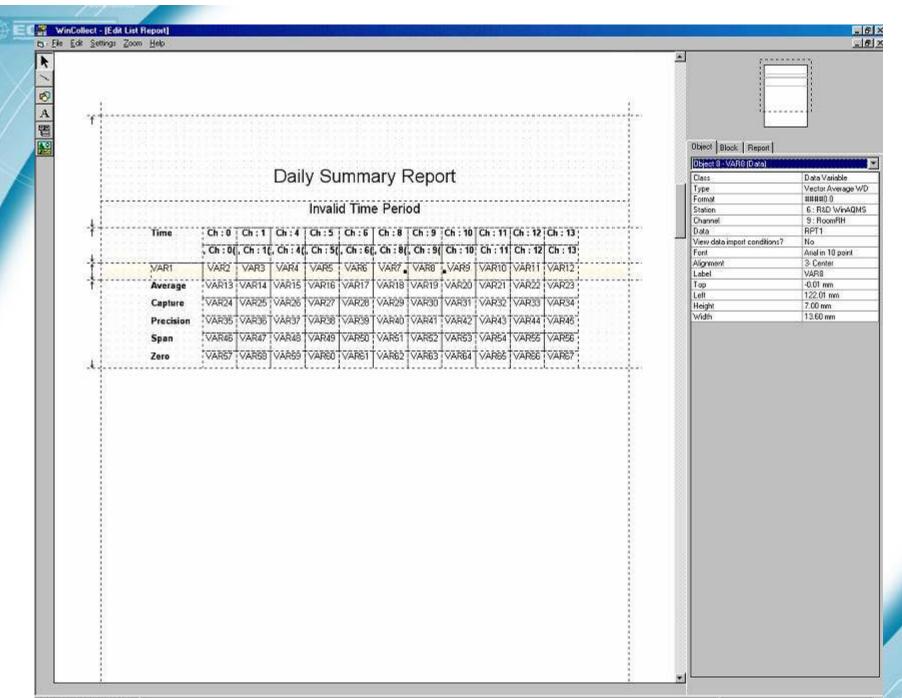


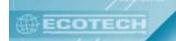
List Reports

List reports easy and quick to design & modify

- List Report Wizard
 - Helps design first report
 - Step by step directions
- Easier to move/copy list report components
- Grid added improving navigation

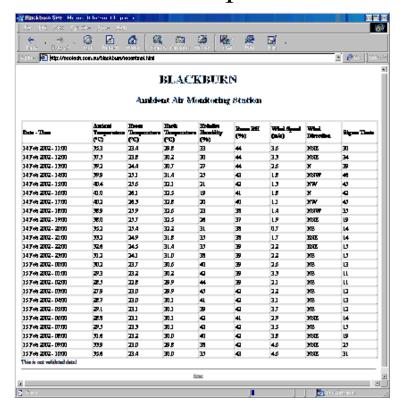






List Reports - Web

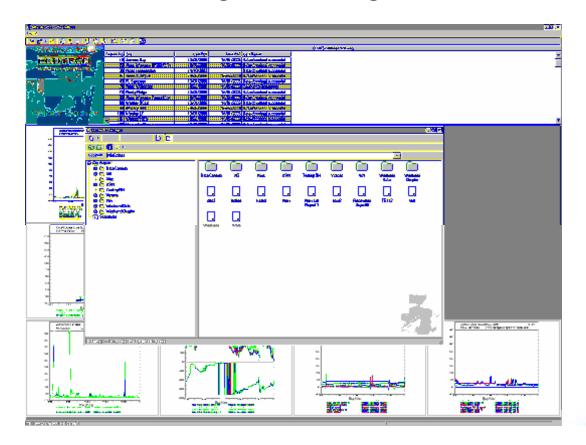
- Can dump list reports straight to an ASCII file
- This enables both text files and HTML files to be generated
- This then enables the HTML file to be automatically transferred to a web site at a pre-set interval
- "Undo" feature added for list report editor

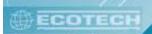


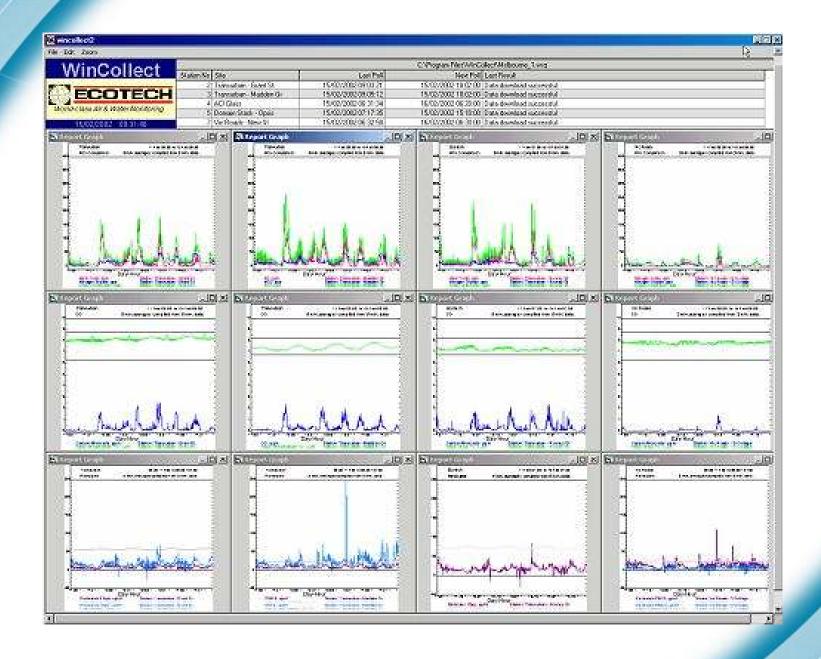


Other Improvements

- Can reboot ESC, 9400 and WinAQMS loggers
- Can re-generate "auto-generation" reports on-demand
- Can monitor multiple stations simultaneous on one screen useful when running monitoring network









Ecotech WinAQMS + Ecotech WinCollect

= a comprehensive data acquisition, maintenance, validation, and reporting system designed by air monitoring maintenance operators & data validators.